In the claims

1-38. (canceled)

39. (currently amended) A coating comprising an effective amount of a bioavailable anti-fouling compound represented by general structure 1:

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wherein

X represents -OH, F, Cl, or Br;

Y represents O, S, or Se;

Z represents optionally substituted aryl or -(CH₂)_m-R₈₀, wherein when Z is substituted, a substituent is selected independently for each occurrence from the group consisting of halo, azido, alkyl, and aralkyl, alkynyl, eyeloalkyl, alkoxyl, nitro, imino, amido, silyl, alkylthio, sulfonyl, sulfonamido, formyl, heterocyclyl, aryl, heteroaryl, and trifluoromethyl;

R₈₀ represents aryl; and

m is an integer in the range 0 to 8 inclusive,

wherein when the coating is applied to a surface of an article the coating releases the compound, thereby impairing biofilm formation on the surface, and wherein the coating is an aqueous, phenolic resin, silicone polymer, epoxy resin, polyamide resin, vinyl resin, elastomers, acrylate polymers, silicone resins, vinyl, aerylic, resin, epoxy, phenolic, adhesive, elastomerie, wax, polyester, polyamide, chlorinated rubber, acrylate, polyurethane, latex, or fluoropolymer, or silicone coating.

40-42. (canceled)

- 43. (**currently amended**) The coating of claim 39, wherein Z represents alkylphenyl, arylphenyl, or aralkylphenyl heteroarylphenyl.
- 44. (**previously presented**) The coating of claim 39, wherein Z represents 4-(2-methylpropyl)phenyl, 4-(1,1-dimethylethyl)phenyl, 4-(1,1-dimethylpropyl)phenyl, 4-pentylphenyl, 4-(1-methyl-1-phenylethyl)phenyl, or 4-(1-methylheptyl)phenyl.
- 45. (canceled)
- 46. (canceled)
- 47. (currently amended) The coating of claim 39, wherein X represents -OH or Cl; and Y represents O.
- 48-50. (canceled)
- 51. (**currently amended**) The coating of claim 39, wherein X represents -OH or Cl; and Z represents alkylphenyl, arylphenyl, or <u>aralkylphenyl</u> heteroarylphenyl.
- 52. (canceled)
- 53. (**previously presented**) The coating of claim 39, wherein X represents -OH or Cl; and Z represents 4-(2-methylpropyl)phenyl, 4-(1,1-dimethylethyl)phenyl, 4-(1,1-dimethylpropyl)phenyl, 4-pentylphenyl, 4-(1-methyl-1-phenylethyl)phenyl, or 4-(1-methylheptyl)phenyl.
- 54-62. (canceled)
- 63. (previously presented) The coating of claim 39, wherein the coating is temporary.
- 64. (canceled)
- 65. (canceled)
- 66. (original) The coating of claim 39, wherein the release rate of the compound from the surface is in the range of about 1 to about 200 μgcm²d⁻¹.
- 67. (canceled)

- 68. (original) The coating of claim 39, wherein the release of the compound is a sustained release.
- 69. (canceled)
- 70. (previously presented) The coating of claim 39, wherein the coating is formulated as a composition selected from the group consisting of paste, gel, liquid, wax, caulk, adhesive, and paint.

71-73. (canceled)

74. (original) The coating of claim 39, wherein the coating is employed as an agent selected from the group consisting of glue, cement and adhesive.

Claims 75-91. (canceled)

- 92. (new) The coating of claim 39, wherein Z represents alkylphenyl.
- 93. (new) The coating of claim 39, wherein X represents -OH or Cl, and Z represents alkylphenyl.